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**Abstract**

*Water security is a critical issue in South Asian regional affairs because rivers, glaciers, hydropower, agriculture, and climate vulnerability are increasingly linked to foreign policy. This article analyses Pakistan's water diplomacy in relation to the Indus Waters Treaty (IWT) and its impact on South Asian regional security. The research adopts a qualitative documentary-historical-institutional approach to examine treaty documents, peer-reviewed sources, institutional documents, and recent developments related to the arbitration. This article seeks to achieve two things: first, it explores Pakistan's legal, technical, bilateral and multilateral diplomacy to secure its lower-riparian interests; and second, it evaluates the impact of water disputes on regional cooperation, conflict management and climate-security diplomacy in South Asia. The study reveals Pakistan's diplomacy has been treaty-sustaining rather than treaty-abandoning, with a focus on continued application of the IWT, technical challenges via institutional channels, dependence on third-party procedures during negotiations standoffs, and growing concern for climate adaptation. But water diplomacy in the region is constrained by defensive strategies, lack of basin-level data, securitization of public discourse, and regional institutions. The paper concludes that Pakistan's future water diplomacy will most likely be successful if it mobilizes a combination of rights-based treaty preservation, climate-sensitive cooperation, transparent hydrological information, professional technical engagement and strategic multilateral diplomacy. The article builds on literature by providing a Pakistan-specific diplomatic approach that links the IWT, bilateral/multilateral diplomacy, regional security, and climate diplomacy.*

**Keywords:** Water Diplomacy; Pakistan; South Asia; Indus Waters Treaty; Hydro-diplomacy; Climate Diplomacy; Regional Security; Transboundary Water Governance.

## **1. Introduction**

### **1.1 Background of the Study**

Water diplomacy is the application of negotiation, legal instruments, institutions, technical cooperation and other confidence-building measures to address water-related disputes in order to avoid the escalation of political tensions. This topic has gained prominence in South Asia due to the trans-boundary nature of major rivers, their role in supporting large-scale agricultural economies, and the impact of climate change. Pakistan is an especially critical case because its economy, food security, irrigation system and hydroelectric power development are all dependent on the Indus River system, most of whose headwaters are upstream of Pakistan. The Indus Waters Treaty (IWT) of 1960, negotiated among Pakistan, India, and the International Bank for Reconstruction and Development, is the main legal agreement for Pakistan-India water relations. It gave Pakistan the right to use most of the western rivers (Indus, Jhelum and Chenab) and India the right to use most of the eastern rivers (Ravi, Beas and Sutlej), subject to certain treaty obligations (Indus Waters Treaty, 1960; World Bank, n.d.). While the IWT is often heralded as being one of the more peaceful transboundary water treaties in operation, it has not been without political controversy. Questions of hydropower design, interpretation of the treaty, information exchange, and procedural options for dispute settlement have featured regularly on the diplomatic agenda (Alam, 2002; Zawahri, 2009). The IWT is a well-institutionalized treaty. It established the Permanent Indus Commission, laid down processes for information-sharing, and it established a tiered dispute-resolution process of questions, differences and disputes. However, the treaty was negotiated in different hydrological and geopolitical times. It failed to comprehensively account for climate change, basin-wide environmental management, groundwater depletion, glacial melt, and the political implications of burgeoning energy demands. This has led to water diplomacy becoming a key element of Pakistan's foreign policy.

### **1.3 Research Objectives**

1. To examine Pakistan's approach to water diplomacy in the context of water-related disputes, especially under the Indus Waters Treaty.
2. To understand the impact of Pakistan's water diplomacy on regional cooperation in South Asia, conflict resolution and climate-security narratives.

### **1.4 Research Questions**

1. How does Pakistan employ legal, technical, bilateral and multilateral diplomacy to resolve water disputes under the Indus Waters Treaty?
2. What are the consequences of Pakistan's water diplomacy for climate, security and conflict management in South Asia?

## **2. Literature Review**

### **2.1 Water Diplomacy and Transboundary Governance**

The literature on water diplomacy suggests that water disputes must not be considered purely resource-allocation issues. They are also political, legal, technical, ecological and institutional challenges that must be addressed through negotiated and flexible processes. Islam and Susskind (2013) highlight that shared water disputes are plagued by uncertainty, multiple value dimensions, power imbalances and institutional factors. Accordingly, sustainable water diplomacy should include processes that draw on technical, negotiation and trust-building. Water has been framed as a potential source of international conflict. But the empirical evidence also reveals that rivers shared between neighbouring countries can

provide opportunities for cooperation as riparian states require certainty about flows, information sharing, infrastructure planning, and conflict resolution (Alam, 2002; Ali, 2008). This is particularly true for South Asia. Rivers are livelihood and security resources but are also one of the few sustained sources of technical interaction between India and Pakistan.

## **2.2 The Indus Waters Treaty as an Institutional Framework**

The IWT is a key focus for research on South Asian hydro politics because it divided the rivers of the Indus Basin, rather than establishing a holistic basin management regime. This "divide-and-rule" model minimized uncertainty in the early post-partition years and enabled irrigation development. But it also constrained possibilities for integrated basin planning, environmental management and climate change adaptation. The historical literature also reveals how the IWT was linked to postcolonial state-building, development planning and geopolitics (Akhter, 2015; Ranjan, 2025). For example, Zawahri (2009) suggests that the treaty established processes to facilitate cooperation despite strained India-Pakistan relations. Alam (2002), also, warns against the view that water scarcity inevitably leads to war, and highlights the importance of institutions and political decisions. A number of commentators point out that the treaty has been durable but not transformational. It has facilitated water distribution and project-level disputes, but it has not produced broader political rapprochement. Ali (2008) characterizes the IWT as a technocratic product that has kept the water going but not fully addressed concerns over water security. Sinha (2010) assesses the treaty as a sustainable agreement whose longevity should not be discounted, but also notes the need to address new technical and environmental challenges.

## **2.3 Pakistan's Indus Diplomacy**

Pakistan's diplomatic stance is determined by its lower riparian status and its reliance on the western rivers for irrigation, urban water supplies and energy planning. Mehsud (2022a) examines Pakistan's Indus diplomacy in the context of significant events that shaped Pakistan's sense of water insecurity vis-à-vis India. This work suggests that Pakistan's diplomacy has been to maintain the treaty regime, protest against projects through technical and legal processes, and multilateralise procedural disputes when these are not resolved through bilateral engagement. Gondal (2020) extends this to examine Pakistan's transboundary water rights under customary international law, implying that Pakistan's diplomacy is also guided by the treaty and broader legal considerations. Pakistan's diplomacy is thus not merely protest. It also involves technical reviews of hydropower infrastructure; the Permanent Indus Commission; recourse to neutral expert, or arbitration, bodies; and the role of the World Bank in treaty administration. Mehsud (2022b) shows that the mediation and dispute settlement in the Indus case can be analysed on multiple scales, such as domestic, bilateral and international. This makes water diplomacy a multifaceted but critical element of Pakistani foreign policy.

## **2.4 Climate Change, Water Security, and Regional Stability**

South Asian water diplomacy has a new urgency in the climate change era. The Intergovernmental Panel on Climate Change places climate change impacts on the water cycle as a serious risk to human and natural systems (IPCC, 2022). The Asia chapter of the report discusses the sensitivity of mountain water systems, such as the upper Indus Basin, to changes in glaciers and hydrology. Qamar et al. (2019) suggest that the IWT is vulnerable to unaddressed threats that may impact security if technical and institutional shortfalls persist. Desai (2021) also talks about the treaty in the age of climate change and the need to move beyond conventional treaty analysis. The literature on water security increasingly links rivers to energy, food, livelihoods and peace. Kalair et al. (2019) address the water-energy-food nexus in the IWT,

demonstrating that water decisions are linked to national development plans. Vinca et al. (2021) show that transboundary cooperation in the Indus Basin can enable sustainable development, implying that cooperation and planning can have economic and environmental advantages. These papers support the view that climate diplomacy should be integrated in Pakistan's water diplomacy.

### **3. Methodology**

#### **3.1 Research Design**

This article is a documentary, historical-institutional study. Its aim is not to quantify water flows but to understand the significance of water disputes for Pakistan's foreign policy and relations with its neighbors. The qualitative research design is suitable because the questions posed relate to strategies, institutions, meanings and policy implications rather than numbers.

#### **3.2 Data Sources**

The article draws on secondary and documentary sources, such as the Indus Waters Treaty, journal articles, books on water diplomacy, institutional documents from the World Bank and the Permanent Court of Arbitration, and climate-policy publications. These were chosen because they specifically focus on Pakistan-India water relations, treaty interpretation, dispute settlement, climate strife and regional cooperation.

#### **3.3 Analytical Procedure**

The analysis was a three-stage process. First, a literature review was conducted to explore the recurring themes in Indus hydro politics: treaty durability, technical issues, legal processes, security discourse, and climate change. Second, the research classified Pakistan's strategies into four types: legal-institutional diplomacy, technical diplomacy, bilateral diplomacy, and multilateral/climate diplomacy. Third, regional implications were examined in terms of cooperation, conflict management, "securitization", climate change adaptation and regional institutions.

#### **3.4 Delimitation**

This study is concerned primarily with Pakistan's diplomatic approach in relation to the Indus River and the IWT. It does not offer a hydrological analysis, engineering evaluation of individual projects or legal overview of any arbitration. It is focused on the regional-security and foreign-policy implications of water diplomacy.

### **4. Conceptual Framework**

The article is grounded in a water-diplomacy framework that brings together the concepts of lower-riparian vulnerability, institutionalized cooperation and climate-security interdependence. Lower-riparian vulnerability is Pakistan's vulnerability to upstream river flows. Institutionalized cooperation refers to the IWT's system for sharing information, technical advice, and resolving disputes. Climate-security interdependence refers to the relationship between floods, droughts, glacier changes, energy and food security, and how these link national water management with regional diplomacy.

In this context, Pakistan's water diplomacy is seen as a trade-off. First, Pakistan needs to uphold its treaty rights and ensure upstream infrastructure is in line with treaty provisions. On the other hand, Pakistan must refrain from reducing water diplomacy to crisis rhetoric, since sustainable water security depends on information exchange, institutional trust, climate adaptation, and technical support. The best diplomatic approach, therefore, is not passivity or full-on securitization, but a balance of legal, scientific, negotiating and climate-diplomatic measures.

**Table 2: Conceptual Linkages in Pakistan's Water Diplomacy**

Concept	Meaning in Pakistan's context	Diplomatic implication
Lower-riparian vulnerability	Pakistan depends heavily on western rivers whose headwaters and upstream projects are outside its direct control.	Emphasis on treaty enforcement, monitoring, and legally structured objections.
Institutionalized cooperation	The IWT provides the Permanent Indus Commission and graded dispute-settlement procedures.	Preference for treaty preservation and procedural diplomacy rather than unilateral disengagement.
Climate-security interdependence	Climate variability affects floods, droughts, glacier melt, food security, and energy planning.	Need for climate diplomacy, early warning, data sharing, and regional adaptation dialogue.

## 5. Pakistan's Water Diplomacy: Strategies and Instruments

### 5.1 Treaty Preservation as a Core Strategy

The overarching diplomacy strategy of Pakistan has been to sustain the IWT as the governing legal framework for water relations with India. This is a reasonable strategy because the treaty offers certain rights, processes and institutional frameworks. For a downstream country, having a legal framework to preserve is a goal in and of itself. While Pakistan has often been critical of specific interpretations or projects, its position has been generally that of treaty preservation, not treaty abandonment (Mehsud, 2022a; Zawahri, 2009).

Treaty preservation also facilitates Pakistan's foreign-policy goals. It enables Pakistan to discuss water security in terms of international law, diplomatic agreements and institutional stability. This discourse is more convincing to international diplomacy than political accusation because it links Pakistan's concerns with a treaty regime. It also can distance water diplomacy from short-term political challenges, even in the context of strained bilateral relations.

### 5.2 Legal and Institutional Diplomacy

The second approach is legal and institutional diplomacy. The IWT includes procedures for questions, differences and disputes. Pakistan has raised objections and concerns about hydropower projects and treaty interpretation. The existence of neutral expert and arbitration procedures provides Pakistan with an avenue for diplomatic recourse besides bilateral negotiation in the event that technical negotiations stall.

The World Bank has a minor but significant role to play because the treaty gives it specific roles in the appointment of certain experts and procedural steps (World Bank, n.d.). The Permanent Court of Arbitration has recently highlighted the importance of institutionalized processes. The PCA details awards and procedural documents in Indus Waters Western Rivers Arbitration, including an award in 2025 in relation to matters of general interpretation (Permanent Court of Arbitration, 2025).

Whether Pakistan or India considers jurisdiction or results satisfactory, the presence of institutional mechanisms is important because it contains disputes to a procedural framework. For Pakistan, these

mechanisms support the view that water disputes can only be resolved through legal and procedural mechanisms and not unilateral force.

### **5.3 Technical Diplomacy and Project-Level Engagement**

Indus Basin water diplomacy is not the exclusive preserve of diplomats. It also requires engineers, hydrologists, lawyers, irrigation specialists and energy planners. A number of Pakistan-India water disputes relate to the technical aspects of run-of-river hydropower development, storage and spillway gates, data sharing, flow timing and the interpretation of engineering standards. Pakistan's technical diplomacy thus rests on its institutional readiness and project-related concerns. Technical diplomacy has two advantages. First, it enables Pakistan to convert security concerns into treaty issues. Second, it avoids a situation in which all water issues become political. But technical diplomacy can be compromised if information is lacking, technical knowledge is dispersed and public narratives compel negotiators to maintain inflexible positions. Pakistan's effectiveness in diplomacy thus depends on domestic coordination between Pakistan's water ministries, the Indus Waters Commission, climate authorities, provincial irrigation departments and foreign-policy agencies.

### **5.4 Bilateral Diplomacy with India**

Bilateral diplomacy is crucial because the IWT cannot rely solely on third-party processes. The Indus commissioners must communicate; they need to exchange data in a timely manner, visit sites and meet technically for early dispute resolution. Even in times of political tension, communication between technical experts can avoid confusion and minimize the risk of conflict. This approach is in line with the general scholarship on the IWT, which stresses that institutional arrangements can outlast political crises (Alam, 2002; Zawahri, 2009). From Pakistan's perspective, bilateral diplomacy works best when it is professional, rigorous and consistent. Public debate that is over-securitized may provide domestic momentum but has the potential to limit diplomatic flexibility. However, highly technocratic engagement may not work if political distrust is high. It is important to engage technically and express Pakistan's treaty concerns at the political level.

### **5.5 Multilateral and Climate Diplomacy**

Water diplomacy for Pakistan now also involves climate diplomacy. The IWT was negotiated in the absence of the climate crisis. But now we have a glacial meltdown, extreme weather, flood risk, altered snowmelts, and increasing water demands, which require diplomacy beyond allocation-based formulas. Pakistan can prioritize adaptation financing, early warning, risk management and basin information systems in climate forums without necessarily revisiting the entire treaty. Multilateral diplomacy should be targeted. The goal is not to globalize bilateral issues, but to link Pakistan's water-security concerns to global climate-risk frameworks. This can enhance Pakistan's advocacy for adaptation assistance, monitoring, and data platforms. It can also reframe some of the water debate from blame and accusation to collaboration and partnership. Vinca et al. (2021) demonstrate that transboundary cooperation in the Indus Basin can generate development opportunities, while Qamar et al. (2019) note that unresolved treaty issues can pose security threats.

## **6. Regional Implications of Pakistan's Water Diplomacy**

### **6.1 India-Pakistan Relations**

Water disputes shape Pakistan-India relations because they impact on agriculture, energy, Kashmir, public opinion and security. If treated purely as strategic threats, water disputes can heighten tensions. When addressed through institutional processes, they can offer a modest avenue for engagement with

India. Research on water conflict between Pakistan and India reveals that water can impact peace and security in the region, but also that well-managed environmental cooperation can help build trust (Munir et al., 2021; Swain, 2009).

The IWT has not brought peace to India-Pakistan, but it has shown that rule-based cooperation can take place even in a tense political environment (Ali, 2008; Sinha, 2010). The challenge for Pakistan lies in representing its interests while keeping water out of the crisis-politics trap. Treaty-based and climate-aware water diplomacy can help institutionalize the phenomenon. This does not prevent conflict but can minimize confusion and provide clear processes for handling disputes.

### **6.2 Regional Cooperation and Institutional Weakness**

South Asia does not have a regional water-governance framework. The South Asian Association for Regional Cooperation has not institutionalized strong transboundary water-cooperation mechanisms, partly because of political tensions. This means water diplomacy is bilateral or ad-hoc. Pakistan's active participation in the IWT, treaty-related functions of the World Bank and arbitration processes therefore fill in for regional governance.

The regional significance is that water diplomacy can either be confined to bilateral crisis management or can lead to a wider agenda of climate adaptation and disaster risk reduction. South Asia should engage in regional flood forecasting, glacial lake monitoring, drought preparedness and scientific data sharing. This type of collaboration does not mean states have to lose sovereignty over water, but they need to accept that climate risks are transboundary and cannot be addressed with unilateral policies.

### **6.3 Climate Security and Human Security**

Human security is increasingly connected with water diplomacy. In Pakistan, water shortages affect farmers, city dwellers, power and politics. Floods and droughts caused by climate change can exacerbate social risks and economic impacts. Hence, water diplomacy should be considered in tandem with Pakistan's adaptation. Foreign policy credibility is enhanced when claims made overseas are met with good water governance, irrigation, groundwater, conservation, and data. Climate-security also offers prospects. Collaborative or coordinated efforts in early-warning systems, disaster mitigation, basin studies and climate finance can mitigate human suffering from hydrological extremes. Aslam (2022) suggests hydro-diplomacy can play a role in environmental peacemaking between Pakistan and India, but such possibilities hinge on political commitments and trust. Non-controversial and positive diplomatic rhetoric can make these prospects more likely.

### **6.4 Implications for International Law and Norms**

Pakistan's reliance on the treaty processes reinforces the norm that transboundary water disputes should be resolved through legal and institutional processes and in good faith. This is crucial in South Asia, where unilateralism can lead to uncertainty and mutual suspicions among riparian states. The IWT's institutional arrangements are not flawless, but their use contributes to the idea that disputes over water sharing need procedural rigor. However, international law cannot replace political trust. Legal processes can define obligations, but they require communication, compliance and institutional memory for implementation. Pakistan's diplomacy should therefore include legal action and efforts to keep the technical and climate change cooperation going.

**Table 3: Pakistan's Water diplomacy strategies & regional implications**

Diplomatic strategy	Main instruments	Regional implication
Treaty preservation	Defence of IWT continuity, emphasis on agreed rights and obligations.	Maintains predictable rules and reduces uncertainty.
Legal-institutional diplomacy	Use of treaty mechanisms, neutral expert procedures, arbitration, and World Bank-related processes.	Keeps disputes inside procedural channels.
Technical diplomacy	Project review, hydrological data, engineering objections, commission-level engagement.	Reduces symbolic escalation and improves evidence-based dialogue.
Bilateral diplomacy	Commission meetings, site visits, official correspondence, political communication.	Maintains limited cooperation during broader political tension.
Climate diplomacy	Adaptation finance, flood forecasting, glacial monitoring, regional climate dialogue.	Links water security with human security and sustainable development.

## 7. Findings and Discussion

### 7.1 Pakistan's Strategy Is Primarily Treaty-Preserving

The first key finding is that Pakistan's diplomacy is treaty-reaffirming. Pakistan tends to rely on the treaty as the primary legal and diplomatic instrument, rather than seek its termination. This reflects Pakistan's lower-riparian status and need for institutional stability. It also reflects the treaty's notable history as a framework that weathered many crises.

### 7.2 Technical Capacity Determines Diplomatic Effectiveness

The second insight is that technical capacity is critical to diplomacy. Water diplomacy is effective when Pakistan can provide accurate, relevant, and treaty-relevant arguments. Poor data collection or institutional coordination, or politically driven narratives, can undermine Pakistan's arguments. Improving technical institutions is thus not just a matter of good governance, but also of foreign policy.

### 7.3 Climate Change Requires a Broader Diplomatic Agenda

The third insight is that water diplomacy is changing in the face of climate change. The Indus Water Treaty (IWT) is still relevant, but it does not consider hydrologic variability, glacial uncertainty, groundwater depletion, extreme floods and ecological sustainability. Therefore, the Pakistani diplomatic strategy should include climate change adaptation, basin science, and disaster-risk reduction management, in addition to treaty enforcement.

### 7.4 Regional Institutions Remain Underdeveloped

Fourth, poor regional institutions restrict South Asia's ability to cooperate on water governance. Regional institutions are weak, so the IWT carries more diplomatic significance than it is meant to. Pakistan should therefore encourage technical and climate-related cooperation even amid unresolved political differences.

## **8. Policy Recommendations**

### **8.1 Strengthen the Technical Base of Diplomacy**

Pakistan needs to develop the technical capacity of its water diplomacy through investments in monitoring, treaty law, project design review, satellite data analysis, and training. A water diplomacy cell could assist the Ministry of Foreign Affairs, Indus Waters Commission, water ministries, climate institutes, provincial irrigation departments, and academics.

### **8.2 Maintain Treaty-Based Engagement**

Pakistan should prioritize treaty continuity, process and rational interpretation of obligations. This approach is more legitimate globally than ad hoc or emotional responses. It also institutionalizes water disputes even when other bilateral relationships sour.

### **8.3 Develop Climate-Sensitive Water Diplomacy**

Pakistan should build climate diplomacy into water diplomacy by working towards cooperation on flood forecasting, glacial risk assessment, drought management and finance for adaptation. This does not mean Pakistan needs to compromise its legal rights under the IWT. Rather, it builds on treaty rights with a climate-proofed future.

### **8.4 Improve Domestic Water Governance**

International diplomacy is more effective with credible water governance. Pakistan should enhance irrigation efficiency, groundwater management, data openness, inter-provincial coordination, reservoir management, and climate adaptation. Internal reforms can mitigate risks, and support Pakistan's international diplomacy.

### **8.5 Promote Non-Securitized Academic and Technical Dialogue**

Track-II and technical dialogues between academics, engineers, climate scientists and policy experts can build knowledge communities resilient to political pressures. These meetings should eschew political rhetoric, and concentrate on risks and technical evidence, treaty interpretation, and humanitarian impacts of extreme events.

## **9. Conclusion**

Water diplomacy is now an important component of Pakistan's South Asian foreign policy. Pakistan's water relations with India are largely regulated by the Indus Waters Treaty, but this treaty is now operating in a more intricate environment characterised by climate change, energy needs, regional suspicion and institutional contestation. Pakistan's diplomatic approach has largely relied on preserving the treaty, making technical arguments, relying on legal-institutional means and participating in relevant international processes.

This approach is understandable as it defends Pakistan's lower-riparian rights and maintains rules-based approaches to dispute resolution. However, treaty preservation is not sufficient. Pakistan's sustainable water future demands a more holistic water diplomacy that includes climate change adaptation and technical assistance, national water reforms and regional trust building. There are important regional ramifications. If water diplomacy is fully securitized, it could further alienate Pakistan and India. If it stays institutionalized and climate-sensitive, this can be a modest but useful forum for cooperation and conflict management and the protection of human security. The future of water diplomacy in South Asia will thus rely not only on written agreements, but also on political restraint, professionalism and a shared response to climate threats.

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